STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, R.I. 02879-1900
(401) 783-3370
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Planning and Procedures Subcommittee

Piccerelli Gilstein & Company
144 Westminster Street
Providence, RI

September 24, 2007
5:00 pm

AGENDA

1. Call to Order
2. Approval of previous meeting minutes

3. **OLD BUSINESS/WORKS IN PROGRESS**

4. **PROPOSED PROGRAMMATIC REVISIONS**
   MANAGEMENT PROCEDURES
   REDBOOK/SAMPS
   A. Greenwich Bay SAMP Section 390.7 – Vegetated Buffers attached

5. **OTHER BUSINESS**
   A. Sea Level Rise attached

6. **NEW BUSINESS**

7. **STAFF REPORTS**

8. **ADJOURN**

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In accordance with notice to members of the Rhode Island Coastal Resources Management Council's Planning and Procedures subcommittee, a meeting of the subcommittee was held on Tuesday, August 21, 2007 at 5:00 p.m. at Coastal Resources Management Council, 4808 Tower Hill Road, Wakefield, RI.

MEMBERS PRESENT

Michael M. Tikoian, Chair
Paul E. Lemont, Vice Chair
David Abedon
Donald Gomez
Bruce Dawson

STAFF PRESENT

Grover Fugate, CRMC Executive Director
Jeff Willis, Deputy Director
James Boyd, Coastal Policy Analyst
Caitlin Chaffee, Coastal Policy Analyst
Brian Goldman, Legal Counsel

OTHER ATTENDEES

Doug Groff
Cynthia Giles, CLF

Call to Order. Mr. Tikoian called the meeting to order at 5:13 p.m.

Hearing no objection, Mr. Tikoian asked the subcommittee to dispense with the reading of the usual opening statements, but to have them reflected within the record nonetheless:

Mr. Tikoian made a brief statement of the subcommittee's function and purpose. The Planning and Procedures subcommittee meeting is an open public meeting; it is not a public hearing. Therefore, discussion is available to the Council members themselves, and to all else at the allowance of the Chairman. Mr. Tikoian further explained that the subcommittee is the program and policy development arm of the Council, and that any programmatic decisions made by this group must ultimately be approved by the full Council in accordance with all proper procedures.

Mr. Tikoian made a statement as to why the subcommittee meetings are held at his offices, Piccerilli Gilstein & Company. Mr. Tikoian stated that the meetings are held at Piccerilli Gilstein & Company to facilitate a number of issues: ease of transition from the previous location (CRMC's Providence office at 40 Fountain Street) which had to be changed because the Council's downtown office was closed due to budget cuts; accommodation of subcommittee members whose work locations and/or residences are in or nearer to Providence; and, it's cost to the agency: free. Mr. Lemont reiterated the fact that the accommodation of members is a key issue for participation in any work of the Council; and, the wear and tear on personal vehicles is high enough and that by holding the meetings in Providence, costs can be kept to a minimum. Also, Mr. Lemont wanted the record to reflect that the Chairman should be congratulated for letting the subcommittee use his company's office space for these meetings because it addresses the many concerns raised above.

The Chair asked the members if there were any questions concerning the July 17, 2007 meeting minutes that was included in their agenda packets. There were no questions and Mr. Tikoian requested a motion to approve the subcommittee's July 17, 2007 meeting minutes.

> *Mr. Lemont, seconded by Mr. Dawson, moved to approve the July 17, 2007 meeting minutes.* ***All voted in favor of the motion to approve.***

Item 5.A – Merging of Lots and SAMP regulations. G. Fugate explained that staff has been asked what SAMP regulations apply in instances where lots are to be merged. Further, it has been presented to staff that municipalities are requiring, in various instances, that such mergers occur. G. Fugate and B. Goldman explained that the agency's regulations for the definition of subdivision mimic those of the state statutes, and therefore when a lot line is moved, it constitutes a subdivision and the agency's regulations take effect. The subcommittee commented that merging to create larger lots is generally better for development purposes, especially in sensitive areas such as the SAMPs, where build-out on pre-platted undersized lots could pose environmental concerns. G. Fugate noted that in instances of lot mergers, some situations occur where the new larger lot would be held to current regulations that require a Special Exception be obtained to develop, where if the lots were not merged and kept at the smaller pre-platted size, they could be developed without having such a high hurdle to jump, and that this issue needed to be addressed. In essence, the special exception requirement appears to penalize those merged larger lots where if not merged, development on each could more readily occur. The subcommittee agreed with this assessment.

G. Fugate explained that staff could develop regulations that address the issue especially in light of municipal requirements for lot mergers that do not penalize that merger but also accounts for addressing the agency's environmental concerns, especially in poorly flushed estuaries such as the SAMPs. Mr. Gomez cautioned that we need to be aware that once merged, lots can again be subdivided into new configurations (ie: more lots that what the merged lots provided), and that any such regulatory development needs to account for this. Mr. Tikoian stated that any such regulation should show that the subdivision causes a net increase in new lot sizes. Mr. Abedon suggested that maybe this task could also address the issue within the agency's entire jurisdiction, not only in the SAMPs.

Mr. Lemont asked if staff knew how many lots where available for merging. G. Fugate could not answer that as most municipal requirements for such occur during the local review process and that that data would be known on a case-by-case basis.

> *Mr. Lemont, seconded by Mr. Abedon, moved to have staff begin the development of regulations that address this issue as discussed.* ***All voted in favor of the motion.***

Item 5.B – Salt Pond Region and Narrow River SAMPs – Affordable Housing Rule-Change. G. Fugate presented how the so-called 'affordable housing' amendments – Section 920.1.A.2(j) and 920.1.B.2(k) of both SAMPs - were originally advertised and approved in accordance with APA procedures, but at the meeting immediately following said approval (February 14, 2006), the council acted on a petition to reconsider these rule changes and directed staff to begin rule-making anew, with the purpose of seeking additional comments and holding a workshop to solicit same.

J. Boyd explained that a workshop was held (June 14, 2006) and how the comments generated at the workshop and through the comment period were addressed and subsequently made part of the staff report and recommendation for action on the future of the rule change for council consideration. J. Boyd also explained how available scientific research gathered and considered by staff affected the issue and how it was incorporated into the staff report.

J. Boyd concluded that based on the comments received and the science considered, staff is recommending that the rule-making process for this proposed regulation change be rescinded; that the proposed so-called 'affordable housing' amendments not be adopted; and, that the language of these SAMP sections remains as is without modification.

> *Mr. Lemont, seconded by Mr. Abedon, moved to suspend the rule-making process for the so-called 'affordable housing' changes.* ***All voted in favor of the motion.***

Item 5.C – State Property Transfers. J. Willis presented the process by which the state disposes of its surplus properties, ie: all appropriate review agencies are notified of any potential such transactions and are asked to comment on the transfer as it may relate to 1) an objection to such transfer; and 2) the agency's rules and regulations. J. Willis explained how a recent DOT proposal to sell a small waterfront parcel was handled by the agency (ie: CRMC comments were forwarded to DOT through the state coordinating agency for such transactions, Statewide Planning) which resulted in a meeting between DOT and CRMC. At said meeting, DOT learned of the agency's regulations generally (Redbook policies) and specifically (Greenwich Bay SAMP) that any potential buyer would need to be aware should they purchase and subsequently develop the property. At the meeting DOT explained to staff how other agencies were objecting to sale. DOT then introduced the concept of only selling the 'riparian' rights and maintaining ownership of the property.

The subcommittee directed G. Fugate to contact the DOT director and discuss this issue with the DOT director and report back to the subcommittee with his findings.

Item 5.D – Conservation Lands and Water Types Designations. G. Fugate introduced Caitlin Chaffee to the subcommittee. C. Chaffee presented the issue wherein the Council was asked by the Audubon Society of Rhode Island to consider re-designating various water bodies abutting Audubon-identified conservation lands that were currently Type 2 waters of higher to Type 1 waters, to further protect those lands. This request was brought to the subcommittee's attention in the fall of 2006 where the subcommittee directed staff to develop a more comprehensive list of such properties that could also be better protected by similarly revising the water type designation. C. Chaffee presented that list and noted that there were properties that staff could support immediately for such a water type change and some that needed additional research on the potential issues associated with such a revision. Of the properties that staff could support immediately, a water type revision to Type 1 would result in almost 1,300 acres of additionally protected conserved lands. Proposed language to support the four (4) water type revision was also provided.

> *Mr. Dawson, seconded by Mr. Gomez, moved to begin rule-making for the four (4) water type changes as presented.* ***All voted in favor of the motion.***

Item 5.E – Submerged Cable Fees per the 2007 Legislation. Mr. Tikoian presented the background of this funding issue relative to Coordination Team initiatives over the past few years. Mr. Tikoian stated that the CT has been trying to fund a suite of monitoring projects that will enhance existing efforts while also providing for a more comprehensive baseline effort. Recent funding requests of the CT have not been as successful as hoped, and recent legislation passed offered that in order to fund the monitoring requests of the CT, certain fees should be established and/or increased so that such revenues would be available to fund these CT-directed monitoring efforts - one of these new and/or increased fees being that the Council establish annual submerged lands fees for transatlantic cables of up to $80,000 per cable. G. Fugate explained that in doing previous research on cable fees from other jurisdictions, an $80,000 per year figure seemed to be reasonable, but that that figure was for total annual revenues, not per cable revenues.

The subcommittee discussed that while the Council would be responsible for creating the fee schedule for such through rule-making procedures, and also for administering the program with each cable owner, the funds would be deposited into a restricted account away from the agency. Mr. Tikoian noted that this was true, but in the spirit of cooperation that is the CT and which the Council is a member, it is a task that the agency needs to embrace and implement in accordance with the legislation.

B. Goldman explained how any such fee should be set using a rational basis and that a fair market analysis should be used. Mr. Lemont offered that the fee might need to be higher than that of what could be expected from a fair market analysis due to the intent of the legislation. Mr. Dawson stated that any such fees should be in-line with similar fees of other jurisdictions.

Mr. Lemont warned that any fee that the Council establishes for these transatlantic submerged cables may be a subject of issue to the PUC, and that it may be possible that a fee schedule established by the Council could result in higher consumer rates, which could put significant pressure on the Council.

Mr. Tikoian directed staff to research the current fees assessed by other jurisdictions and develop a fair market analysis with rationale for establishing an annual fee schedule for submerged transatlantic cables to be discussed at a future subcommittee meeting.

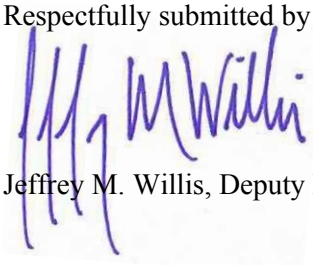
Item 7.A. – Staff Report – Proposed Rule Changes Currently Out-to-Notice. G. Fugate explained that the proposed regulations currently undergoing rule-making and in the public comment stage of such received comments from Save the Bay and CLF to hold a workshop on same, and specifically to address the proposed Salt Pond Region and Narrow River SAMP regulation changes. That workshop was recently held where staff presented an explanation of each proposed change and received comments from the 20 ± persons in attendance. J. Boyd detailed the comments received and noted that based on those comments and any received during the formal comment period had been incorporated into a staff report to the Council for additional consideration when said proposed regulations are in front of the Council for a hearing.

Mr. Tikoian noted for the record that Save the Bay wrote thanking the Council for holding the workshop. J. Boyd added that the Council had just received a similar letter from CLF.

> *Mr. Lemont, seconded by Mr. Dawson, moved to accept staff's report that addresses the additional comments received for the proposed regulations currently undergoing rule-making that will be available for council consideration at the upcoming hearing for said regulations.* ***All voted in favor of the motion.***

ADJOURNMENT. Mr. Lemont, seconded by Mr. Dawson, moved to adjourn the subcommittee meeting. All voted in favor of the motion and the meeting was adjourned at 6:47 p.m.

Respectfully submitted by



Jeffrey M. Willis, Deputy Director

P&P Subcommittee
Agenda Items

September 24, 2007

Item 4.A

Greenwich Bay SAMP

Revise Section 390.7. Vegetated Buffers as follows:

Policies

1. CRMC will update and develop standards for coastal buffer zone management specifically within suburban areas. Once completed, the CRMC will amend the Special Area Management Plan to adopt the new standards.

2. CRMC encourages the establishment of native vegetated areas along shorelines, tributaries, and wetlands in the Greenwich Bay watershed where designated coastal buffer zones or areas of existing undisturbed natural vegetation (non-landscaped areas) are not present. CRMC shall issue a certificate to property owners recognizing that they have voluntarily planted a native vegetated area on their property. Property owners holding a certificate may make alterations to the native vegetated area and will not be subject to the coastal buffer zone regulations unless these regulations are triggered by alterations to existing structures or new development on the lot.

3. It is the CRMC's policy to develop conservation easements for the Greenwich Bay watershed that permanently restrict development, such as docks, in coastal buffers.

Prohibitions

1. New commercial or residential structures are prohibited on lots abutting critical areas unless they can meet the required standards below.

2. Alterations to existing commercial or residential structures that result in the expansion of the structural lot coverage such that the square footage of the foundation increases by 50 percent or more are prohibited on lots abutting critical areas unless they can meet the required standards below.

3. No land shall be subdivided to create additional lots unless each lot can accommodate the required coastal buffer zone.

Standards

1. Applicants for new construction or alterations to existing commercial and residential structures that trigger coastal buffer requirements and that are adjacent to critical areas must meet one of the following:

(a) Applicants must meet the full required coastal buffer zone. No variances to the buffer width is permissible under this option, however, buffer zone management, view corridors, and recreational structures as provided under CRMP Section 150.F may be permitted; or

(b) Applicants may seek a variance to the required coastal buffer zone up to fifty (50) percent if the applicant: (1) designs and constructs the project to meet the requirements of CRMP Section 300.6 exclusively with low impact development methods; and (2) provides a conservation easement to the CRMC for the buffer area and any adjacent coastal wetlands within the property boundary.

Note: Section 910.3 and 910.4 also need to be modified as here. Additionally, we should strike all of the redundant and superfluous Section 150 language here – Refer to CRMP Section 150!

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Deleted: 4. No land shall be subdivided unless it can accommodate the required coastal buffer zone.¶

Deleted: New structures are prohibited within the coastal buffer zone required around critical areas unless part of a buffer management plan.

Deleted: an

Deleted: or structures on a residential lot

Deleted: without the establishment of the coastal buffer zone required in that area.

Redbook

Item 5.A

Create NEW

Section 145.
Climate Change and Sea Level Rise

A. Definition

1. Climate is the long-term weather average observed within a geographic region, and climate change refers to fluctuations in the Earth's climate system as a result of both natural and anthropogenic causes. Generally, climate change is evidenced by rising global temperatures; increasing extremes within the hydrologic cycle resulting in more frequent floods and droughts; and rising sea level.

2. Sea level rise refers to the change in mean sea level over time in response to global climate and local tectonic changes. Sea level is the height of the sea with respect to a horizontal control point, or benchmark (e.g. The National Geodetic Vertical Datum of 1929 or NGVD 29; The North American Vertical Datum of 1988 or NAVD 88) and averaged over a period of time sufficient to smooth out fluctuations caused by waves and tides. NGVD 29 is based on the local mean sea level in 1929, which has changed over time. NAVD 88 is now the official civilian vertical datum for surveying and mapping activities in the United States. The conversion to NAVD 88 should be accomplished on a project-by-project basis. Tidal datums, such as mean sea level (MSL) or mean high water (MHW) vary according to the specific location, and represent the mean heights observed over the National Tidal Datum Epoch. Conversions between the datums can be made at www.tidesandcurrents.noaa.gov or calculated through the US Army Corps of Engineers CORPSCON, http://crunch.tec.army.mil/software/corpscon/corpscon.html.

3. Sea level rise includes *eustatic* contributions - global changes responsible for worldwide variations in sea level (e.g. thermal expansion of seawater, melting glacial ice sheets), and *isostatic* effects - regional changes in land surface elevations that are related to the tectonic response to ice or sediment loading, and land subsidence due to extraction of water or oil. The combination of eustatic and isostatic effects at a particular location is known as relative sea level rise.

B. Findings

1. On very long (geologic) time scales, sea level naturally fluctuates in response to variations in astronomical configurations that result in changes in the Earth's climate system. Since the Last Glacial Maximum (approximately 20,000 years ago), global sea level has risen by over 390 feet (120 meters), as water that was previously trapped in continental ice sheets has made its way into the global ocean.

2. Sea level rise is a direct consequence of global climate change. Greenhouse gas emissions to the atmosphere increase surface warming, which in turn increases the volume of ocean waters due to thermal expansion, and accelerates the melting of glacial ice. Atmospheric greenhouse gas concentrations are already higher than levels at the last interglacial period, when sea levels were 13 to 19 feet (4 to 6 meters) higher than at present (Overpeck et al., 2006) and are expected to continue to increase through 2100.

3. Human activities and increased concentrations of greenhouse gasses in the atmosphere have *accelerated* the historic rate of eustatic sea level rise. Over the last 100 years, sea levels have risen 0.56 feet (0.17 m) globally. The average rate of rise during the years between 1961 and 2003 was 0.71 in per year (1.8 mm/yr), and between 1993 and 2003 the rate nearly doubled to 1.2 in per year (3.1 mm/yr) (IPCC, 2007).

4. In addition to rising global sea levels, the land surface in Rhode Island is subsiding at a rate of approximately 6 inches (15 cm) per century (Douglas, 1991). The combination of these two effects is evident from the long-term trend recorded by the Newport tide gauge (Figure 1), which indicates a rate of 10.1 in +/- 1.2 in (25.7 cm +/- 3.1 cm) of relative sea level rise over the last century.

5. The rate of sea level rise is accelerating. Future sea level rise, like the recent rise, is not expected to be globally uniform or linear. Some regions will become more substantially inundated than the global average, and others less. Of foremost concern is the trend in eustatic rise as observed from tide-gauge records over the past century. The rate of rise during the past 20 years is 25% faster than the rate of rise in any 20 year period that exists in the instrumental record (Church and White, 2006; Rahmstorf et al., 2007).

6. Model-simulated projections of global sea level over the 21st century also clearly demonstrate accelerated progression. Predictions have ranged from 4 inches (10 cm) to several feet above current levels. As a rule, sea level estimates are increasing as the science of modeling becomes more developed.

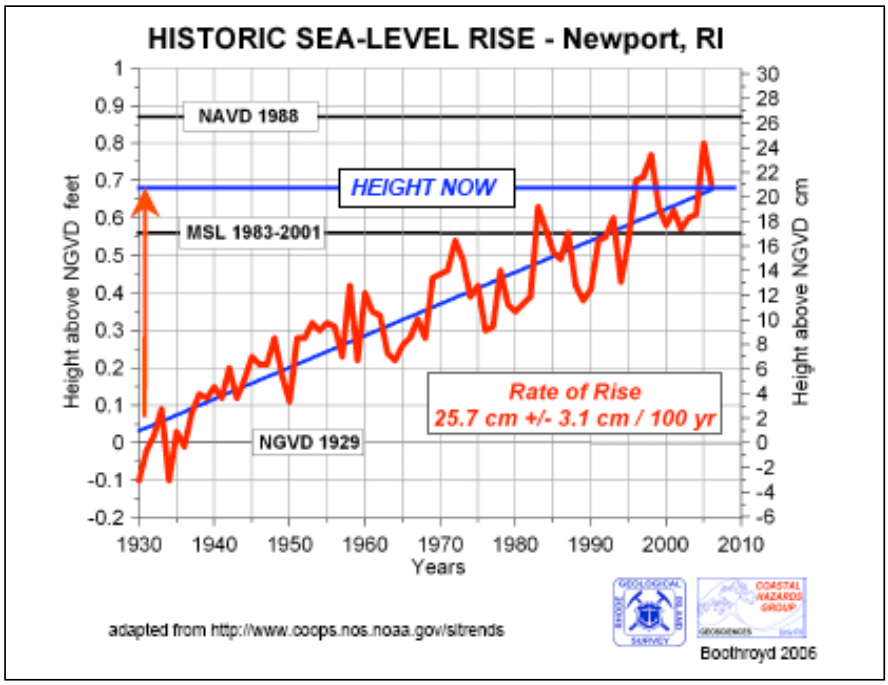

Figure 1 – Historic Sea Level Rise in Newport, RI shows an increase of approximately 0.64 feet between 1930 and 2006.

7. When compared with actual observations, modeling scenarios can be quite conservative, as recently observed rates of continental ice melt are greater than those used to generate estimates of sea level rise over the coming century. Since 1990, sea level has been rising faster than the rate predicted by models used to generate IPCC (2001) estimates (Rahmstorf et al., 2007).

8. Higher global temperatures indicate a greater risk of destabilizing the Greenland and West Antarctic ice sheets, yet a great amount of uncertainty remains as to the overall contribution from ice sheet melting. The recent and much publicized Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2007) projects 7 to 23 in (18 to 59 cm) of eustatic sea level rise in the coming century. These estimates do not include contributions of ice flow dynamics or local subsidence.

9. The most recent science uses a semi-empirical relationship to correlate global sea level rise to global mean surface temperature (a good approximation for observations of the 20th century). When this relationship is applied to 21st century warming scenarios, eustatic rise is projected between 1.6 to 4.6 feet (50 to 40 cm) above 1990 levels (Rahmstorf, 2007). Accounting for regional isostatic effects, this estimate suggests that by 2100 sea level in Rhode Island could rise approximately 3 to 5 feet (91 to 155 cm).

10. Climate change will result in wide scale systematic changes in the terrestrial and marine environments. This will result in ecosystem shifts that will challenge natural resource managers' efforts to cope and adapt to the new regime.

11. Future increases in relative sea level will displace coastal populations, threaten infrastructure, intensify coastal flooding and ultimately lead to the loss of recreation areas, public space, and coastal wetlands,

12. Coastal infrastructure will become increasingly susceptible to complications from rising sea levels, as the upward trend continues. Residential and commercial structures, roads, and bridges will be more prone to flooding. Sea level rise will also reduce the effectiveness and integrity of existing seawalls and revetments, designed for a historically lower water level.

13. Higher sea levels will result in changes in surface water and groundwater characteristic. Salt intrusion into aquifers will contaminate drinking waters and higher water tables will compromise wastewater treatment systems in the coastal zone.

14. Future increase in relative sea level will increase the extent of flood damage over time. Lower elevations will become increasingly susceptible to flooding as storm surge and reaches further inland due to both sea level rise in concert with an increased frequency and intensity of storms predicted from climate change. As a result, more coastal lands will be susceptible to erosion.

15. Marsh surfaces have kept up with sea level rise through the process of accretion (the build-up of live and decaying plant parts and inorganic sediments). In many coastal areas, marshes and other coastal habitats will need space to migrate inland in order to keep pace with sea level rise

16. Barrier islands are forced landward with rising sea levels. Increased frontal erosion and retreat of the barriers will cause Rhode Island's south shore to migrate continuously landward with rising sea levels.

17. Due to the timescales associated with climate processes and feedbacks, anthropogenic warming and sea level rise will continue for centuries regardless of steps taken to curb greenhouse gas emissions (IPCC, 2007).

18. Pursuant to R.I.G.L. § 46-23-6, the Council is authorized to develop and adopt policies and regulations necessary to manage the coastal resources of the state and protect life and property from coastal hazards resulting from projected sea level rise and increased frequency and intensity of coastal storms due to climate change. The Council is also authorized to collaborate with the State Building Commissioner and adopt freeboard calculations in accordance with R.I.G.L. § 23-27.3-100.1.5.5.

C. Policies

1. The Council will review its policies, plans and regulations to proactively plan for and adapt to climate change and sea level rise. The Council will integrate climate change and sea level rise scenarios into its operations to prepare Rhode Island for these new conditions and make our coastal area more resilient.

2. The Council's sea level rise policies are based upon the CRMC's legislative mandate to preserve, protect, and where possible, restore the coastal resources of the state through comprehensive and coordinated long-range planning.

3. The Council recognizes that sea level rise is ongoing and its foremost concern is the accelerated rate of rise and the associated risks to Rhode Island coastal areas today and in the future. Accordingly, for planning and management purposes, it is the Council's policy to accommodate an expected 3 to 5 foot rise in sea level by 2100 in the siting, design, and implementation of public and private coastal activities and to insure proactive stewardship of coastal ecosystems under these changing conditions.

D. References

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